and have done some work on the pathological side of it.

At the moment, certain questions occur to me. Among others, I may ask what we know concerning the biochemical activities of the pituitary gland? Undoubtedly, I think, the reply is that we know very little about it, very little indeed, even though there be a fairly extensive literature relative to the morphological peculiarities of its cells. And what evidence is there, if any, to justify us in considering this gland as an independent unit apart from the allied blood vessel glands? Are we as yet able to prove, for example, that, irrespective of a mere gland mass factor, the pituitary secretion alone causes peculiar and definite clinical symptoms? I think not. Certainly none which can be identified in this individual.

The trophic changes occurring in acromegaly are, of course, well known. They are considered to be secondary to a morbid pituitary status. Usually, however, they are so conspicuous as hardly to be mistaken or misinterpreted. But, obviously, none of them is present in this patient. His face, it is true, is rather heavy, but not exceptionally so, by any means, and it has not at all the leonine appearance seen in acromegaly. The early skin changes are also absent. The superciliary ridges are not thickened, there certainly is no prognathism, and, moreover, there is an entire absence of the typical kyphosis. I am besides unable to agree with Dr. Moffitt that there are phalangeal changes at all characteristic or worthy of special note.

As to the X-ray picture, I feel inclined to accept with reserve the interpretation of the shadows at the base. At best such observations are unreliable. May not the lateral view of the sella turcica in many cases be rendered obscure by the overhanging clinoid processes?

Considering the age of this patient, his manifest freedom from the characteristic signs of pituitary disease as we recognize it in acromegaly, it seems improbable that the gland is definitely morbid. It is well to remember that, in the presence of outspoken disease of the gland the peripheral changes are usually rather striking. It is doubtful whether we can detect minor alterations of its function.

Upon the whole, therefore, it seems hardly justifiable to make a diagnosis of pituitary disease where, as in this instance, the objective data are so meager and inconclusive.

Herbert C. Moshitt: I purposely presented this man to get some discussion. I am sorry that Dr. Quinan has not kept in touch with recent literature on this subject, because he would then know that a great deal of work has been done on the question of hypophysis enlargement in enuchs. In the book by Lamois and Roy, which is a most fascinating one on acromegaly and giantism, a number of pages are given to the discussion of this literature on this form of hypophysis enlargement. I certainly agree with Dr. Cooper that we have to demonstrate some actual destruction or actual dislocation of the clinoid process before we can say whether there is a growth in the pituitary fossa. As mentioned in connection with this man, hydrocephalus may give rise to optic change, and yet we see not a few cases of hydrocephalus in children with secondary involvement of the pituitary fossa and signs that suggest the pituitary secretion has been affected by pressure on the gland. The changes that we get in the extremities in marked cases of acromegaly are unmistakable; we may recognize such cases on the streets. We must remember that these changes are not necessarily progressive, they may be distinctly intermittent, the period of growth may alternate with a period of quiescence, contrary to what Dr. Quinan noticed in his case. In the cases of hypopituitarism that I have seen, the appetite has not been excessive. I had a case of a woman in Berkeley who was quite stout, and her appetite was decidedly below the normal. The young woman whose case I presented to-night has no abnormal appetite; this man has a most voracious one.

Section on Surgery, Tuesday, February 21, 1911.

Demonstration of Two Specimens of Large Vesical Calculi Removed from Female Bladders by Litholapaxy and the Operating Cystoscope.

By HENRY MEYER, M. D., San Francisco.

Specimen No. 1. Was taken from a married lady, 34 years of age, with three children. Her bladder symptoms were more or less constant and existed for a long but indefinite period; frequent urination, tenesmus and pyuria were present. Cystoscopy showed a large calculus, movable in the bladder, black in color. This calculus measured one and one-half inches in diameter.

February 6 I operated the patient, first with the ordinary lithotrite and evacuated the crystalline covering (which averaged three-sixteenths of an inch in thickness) which surrounded a nucleus which proved to be a foreign body. Cystoscopy then showed a large mass lying in the bladder, green in color, which was broken apart with the operating cystoscope into several masses, and each piece was grasped and removed separately through the urethra with the Nitze operating cystoscope, under the guidance of my own eye. The masses proved to be some variety of wood which is capable of swelling in water: the water in which it is immersed becomes viscid. The green color is due to the absorption of methylene blue which had been prescribed for her. The operation was performed and completed at one sitting; two drams of a two per cent solution of novacain was instilled into the urethra and the operation was both painless and bloodless. No reaction followed, and the patient was well immediately after the operation and has remained so. She states that she does not know how the substance entered the bladder, and does not know the nature of it.

Specimen No. 2. The debris of a very large phosphatic calculus was removed from the bladder of a married lady, 44 years of age, by litholapaxy. It had no foreign body as a nucleus. This was the most aggravated case of cystitis I have ever seen; it was associated with severe tenesmus, pyuria, hematuria and phosphaturia and the urine was very foul. This patient enjoyed no freedom from pain for several years. She had no control of the vesical sphincter for two years and this loss of control of the sphincter of the bladder was complete under profound narcosis, making it exceedingly difficult to open the lithotrite in a bladder contracted around this calculus, which was two inches in diameter. This patient suffered excruciating pain spontaneously and no instrument could be tolerated in the bladder without a general anesthetic. The operation was completed in one sitting, the patient experiencing great relief as a result of the operation. Three weeks after the operation, while free from most of her pain and discomfort, she had only regained slight use of her bladder sphincter, most of her urine dribbled from the bladder as it did before the operation. The cystitis was gradually subsiding. This was an aggravated case of phosphaturia associated with calculus, and the first case of very large calculus in the female bladder that I have met with in my experience without the existence of a foreign body as a nucleus.

A Report of Four Cases of Perforating Gunshot Wound of the Abdomen.

By I. W. THORNE, M. D., San Francisco.

There is no difference of opinion as far as I have been able to learn existing between modern writers on the subject of penetrating gunshot wounds of the abdomen—be these writers civil or military—as to the treatment of such wounds. The methods of civil and military practice differ vastly, however. The reason for which may be found in any late